



## SEQUENCE LISTING

<110> Boylan, John  
Bowers, Alex

<120> Novel Serine Threonine Kinase Member, h2520-59

<130> 01017/36524A

<140> US/09/909,474

<141> 2001-07-19

<150> US 60/219,204

<151> 2000-07-19

<160> 15

<170> PatentIn version 3.0

<210> 1

<211> 2059

<212> DNA

<213> Homo sapiens

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<221> CDS

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Thr Pro Leu Ala Ala Pro Ala Gly Ser Leu Ser Arg Lys Lys Arg Leu  
5 10 15

gag ttg gat gac aac tta gat acc gag cgt ccc gtc cag aaa cga gct 153  
Glu Leu Asp Asp Asn Leu Asp Thr Glu Arg Pro Val Gln Lys Arg Ala  
20 25 30 35

cga agt ggg ccc cag ccc aga ctg ccc ccc tgc ctg ttg ccc ctg agc 201  
Arg Ser Gly Pro Gln Pro Arg Leu Pro Pro Cys Leu Leu Pro Leu Ser  
40 45 50

cca cct act gct cca gat cgt gca act gct gtg gcc act gcc tcc cgt 249  
Pro Pro Thr Ala Pro Asp Arg Ala Thr Ala Val Ala Thr Ala Ser Arg  
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ctt ggg ccc tat gtc ctc ctg gag ccc gag gag ggc ggg cgg gcc tac 297  
Leu Gly Pro Tyr Val Leu Leu Glu Pro Glu Glu Gly Gly Arg Ala Tyr  
70 75 80

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Arg Ala Leu His Cys Pro Thr Gly Thr Glu Tyr Thr Cys Lys Val Tyr  
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Pro Val Gln Glu Ala Leu Ala Val Leu Glu Pro Tyr Ala Arg Leu Pro  
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Lys	Arg	Ala	Arg	Ser	Gly	Pro	Gln	Pro	Arg	Leu	Pro	Pro	Cys	Leu	Leu
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Pro	Leu	Ser	Pro	Pro	Thr	Ala	Pro	Asp	Arg	Ala	Thr	Ala	Val	Ala	Thr
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Ala	Ser	Arg	Leu	Gly	Pro	Tyr	Val	Leu	Leu	Glu	Pro	Glu	Glu	Gly	Gly
65					70					75				80	

Arg	Ala	Tyr	Arg	Ala	Leu	His	Cys	Pro	Thr	Gly	Thr	Glu	Tyr	Thr	Cys
				85					90					95	

Lys Val Tyr Pro Val Gln Glu Ala Leu Ala Val Leu Glu Pro Tyr Ala  
 100 105 110

Arg Leu Pro Pro His Lys His Val Ala Arg Pro Thr Glu Val Leu Ala  
 115 120 125

Gly Thr Gln Leu Leu Tyr Ala Phe Phe Thr Arg Thr His Gly Asp Met  
 130 135 140

His Ser Leu Val Arg Ser Arg His Arg Ile Pro Glu Pro Glu Ala Ala  
 145 150 155 160

Val Leu Phe Arg Gln Met Ala Thr Ala Leu Ala His Cys His Gln His  
 165 170 175

Gly Leu Val Leu Arg Asp Leu Lys Leu Cys Arg Phe Val Phe Ala Asp  
 180 185 190

Arg Glu Arg Lys Lys Leu Val Leu Glu Asn Leu Glu Asp Ser Cys Val  
 195 200 205

Leu Thr Gly Pro Asp Asp Ser Leu Trp Asp Lys His Ala Cys Pro Ala  
 210 215 220

Tyr Val Gly Pro Glu Ile Leu Ser Ser Arg Ala Ser Tyr Ser Gly Lys  
 225 230 235 240

Ala Ala Asp Val Trp Ser Leu Gly Val Ala Leu Phe Thr Met Leu Ala  
 245 250 255

Gly His Tyr Pro Phe Gln Asp Ser Glu Pro Val Leu Leu Phe Gly Lys  
 260 265 270

Ile Arg Arg Gly Ala Tyr Ala Leu Pro Ala Gly Leu Ser Ala Pro Ala  
 275 280 285

Arg Cys Leu Val Arg Cys Leu Leu Arg Arg Glu Pro Ala Glu Arg Leu  
 290 295 300

Thr Ala Thr Gly Ile Leu Leu His Pro Trp Leu Arg Gln Asp Pro Met  
 305 310 315 320

Pro Leu Ala Pro Thr Arg Ser His Leu Trp Glu Ala Ala Gln Val Val  
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Pro Asp Gly Leu Gly Leu Asp Glu Ala Arg Glu Glu Glu Gly Asp Arg  
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Glu Val Val Leu Tyr Gly  
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Lys	Arg	Ala	Arg	Ser	Gly	Pro	Gln	Pro	Arg	Leu	Pro	Pro	Cys	Leu	Leu	35	40	45	
Pro	Leu	Ser	Pro	Pro	Thr	Ala	Pro	Asp	Arg	Ala	Thr	Ala	Val	Ala	Thr	50	55	60	
Ala	Ser	Arg	Leu	Gly	Pro	Tyr	Val	Leu	Leu	Glu	Pro	Glu	Glu	Gly	Gly	65	70	75	80
Arg	Ala	Tyr	Gln	Ala	Leu	His	Cys	Pro	Thr	Gly	Thr	Glu	Tyr	Thr	Cys	85	90	95	
Lys	Val	Tyr	Pro	Val	Gln	Glu	Ala	Pro	Ala	Val	Leu	Glu	Pro	Tyr	Ala	100	105	110	
Arg	Leu	Pro	Pro	His	Lys	His	Val	Ala	Arg	Pro	Thr	Glu	Val	Leu	Ala	115	120	125	
Gly	Thr	Gln	Leu	Leu	Tyr	Ala	Phe	Phe	Thr	Arg	Thr	His	Gly	Asp	Met	130	135	140	
His	Ser	Leu	Val	Arg	Ser	Arg	His	Arg	Ile	Pro	Glu	Pro	Glu	Ala	Ala	145	150	155	160
Val	Leu	Phe	Arg	Gln	Met	Ala	Thr	Ala	Leu	Ala	His	Cys	His	Gln	His	165	170	175	
Gly	Leu	Val	Leu	Arg	Asp	Leu	Lys	Leu	Cys	Arg	Phe	Val	Phe	Ala	Asp	180	185	190	
Arg	Glu	Arg	Lys	Lys	Leu	Val	Leu	Glu	Asn	Leu	Glu	Asp	Ser	Cys	Val	195	200	205	
Leu	Thr	Gly	Pro	Asp	Asp	Ser	Leu	Trp	Asp	Lys	His	Ala	Cys	Pro	Ala	210	215	220	
Tyr	Val	Gly	Pro	Glu	Ile	Leu	Ser	Ser	Arg	Ala	Ser	Tyr	Ser	Gly	Lys	225	230	235	240
Ala	Ala	Asp	Val	Trp	Ser	Leu	Gly	Val	Ala	Leu	Phe	Thr	Met	Leu	Ala	245	250	255	
Gly	His	Tyr	Pro	Phe	Gln	Asp	Ser	Glu	Pro	Val	Leu	Leu	Phe	Gly	Lys	260	265	270	
Ile	Arg	Arg	Gly	Ala	Tyr	Ala	Leu	Pro	Ala	Gly	Leu	Ser	Ala	Pro	Ala	275	280	285	
Arg	Cys	Leu	Val	Arg	Cys	Leu	Leu	Arg	Arg	Glu	Pro	Ala	Glu	Arg	Leu	290	295	300	

Thr Ala Thr Gly Ile Leu Leu His Pro Trp Leu Arg Gln Asp Pro Met  
305 310 315 320

Pro Leu Ala Pro Thr Arg Ser His Leu Trp Glu Ala Ala Gln Val Val  
325 330 335

Pro Asp Gly Leu Gly Leu Asp Glu Ala Arg Glu Glu Glu Gly Asp Arg  
340 345 350

Glu Val Val Leu Tyr Gly  
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20 25 30

Gln Gly Trp Ser Trp Ala Gly Ile Pro Ser Ser Ala Ala Ala Gln Arg  
35 40 45

Ala Gly Pro Pro Ala Gly Ala Leu Glu Ala Leu Ser Pro Gly Gly Ala  
50 55 60

Arg Ala His Ala Glu Arg Arg Gly Glu Met Arg Ala Thr Pro Leu Ala  
65 70 75 80

Ala Pro Ala Gly Ser Leu Ser Arg Lys Lys Arg Leu Glu Leu Asp Asp  
85 90 95

Asn Leu Asp Thr Glu Arg Pro Val Gln Lys Arg Ala Arg Ser Gly Pro  
100 105 110

Gln Pro Arg Leu Pro Pro Cys Leu Leu Pro Leu Ser Pro Pro Thr Ala  
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Pro Asp Arg Ala Thr Ala Val Xaa Thr Xaa Ser Arg Xaa Xaa Xaa Tyr  
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Val Leu Leu Glu Ala Arg Arg Xaa Ala  
145 150

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Trp Gly His Ala Gln Pro Gly Ala Lys Arg His Arg Ile Pro Glu Pro  
20 25 30

Glu Ala Ala Val Leu Phe Arg Gln Met Ala Thr Ala Leu Ala His Cys  
35 40 45

His Gln His Gly Leu Val Leu Arg Asp Leu Lys Leu Cys Arg Phe Val  
50 55 60

Phe Ala Asp Arg Glu Arg Lys Lys Leu Val Leu Glu Asn Leu Glu Asp  
65 70 75 80

Ser Cys Val Leu Thr Gly Pro Asp Asp Ser Leu Trp Asp Lys His Ala  
85 90 95

Cys Pro Ala Tyr Val Gly Pro Glu Ile Leu Ser Ser Arg Ala Ser Tyr  
100 105 110

Ser Gly Lys Ala Ala Asp Val Trp Ser Leu Gly Val Ala Leu Phe Thr  
115 120 125

Met Leu Ala Gly His Tyr Pro Phe Gln Asp Ser Glu Pro Val Leu Leu  
130 135 140

Phe Gly Lys Ile Arg Arg Gly Ala Tyr Ala Leu Pro Ala Gly Leu Ser  
145 150 155 160

Ala Pro Ala Arg Cys Leu Val Arg Cys Leu Leu Arg Arg Glu Pro Ala  
165 170 175

Glu Arg Leu Thr Ala Thr Gly Ile Leu Leu His Pro Trp Leu Arg Gln  
180 185 190

Asp Pro Met Pro Leu Ala Pro Thr Arg Ser His Leu Trp Glu Ala Ala  
195 200 205

Gln Val Val Pro Asp Gly Leu Gly Leu Asp Glu Ala Arg Glu Glu Glu  
210 215 220



Gly Asp Arg Glu Val Val Leu Tyr Gly  
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<210> 11  
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<213> Homo sapiens

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20 25 30  
Ala Arg Ala His Ala Glu Arg Arg Gly Glu Met Arg Ala Thr Pro Leu  
35 40 45  
Ala Ala Pro Ala Gly Ser Leu Ser Arg Lys Lys Arg Leu Glu Leu Asp  
50 55 60  
Asp Asn Leu Asp Thr Glu Arg Pro Val Gln Lys Arg Ala Arg Ser Gly  
65 70 75 80  
Pro Gln Pro Arg Leu Pro Pro Cys Leu Leu Pro Leu Ser Pro Pro Thr  
85 90 95  
Ala Pro Asp Arg Ala Thr Ala Val Ala Thr Ala Ser Arg Leu Gly Pro  
100 105 110  
Tyr Val Leu Leu Glu Pro Glu Glu Gly Gly Arg Ala Tyr Gln Ala Leu  
115 120 125  
His Cys Pro Thr Gly Thr Glu Tyr Thr Cys Lys Val Tyr Pro Val Gln  
130 135 140  
Glu Ala Leu Ala Val Leu Glu Pro Tyr Ala Arg Leu Pro Pro His Lys  
145 150 155 160  
His Val Ala Arg Pro Thr Glu Val Leu Ala Gly Thr Gln Leu Leu Tyr  
165 170 175  
Ala Phe Phe Thr Arg Thr His Gly Asp Met His Ser Leu Val Arg Ser  
180 185 190  
Arg His Arg Ile Pro Glu Pro Glu Ala Ala Val Leu Phe Arg Gln Met  
195 200 205  
Ala Thr Ala Leu Ala His Cys His Gln His Gly Leu Val Leu Arg Asp  
210 215 220  
Leu Lys Leu Cys Arg Phe Val Phe Ala Asp Arg Glu Arg Lys Lys Leu  
225 230 235 240  
Val Leu Glu Asn Leu Glu Asp Ser Cys Val Leu Thr Gly Pro Asp Asp  
245 250 255  
Ser Leu Trp Asp Lys His Ala Cys Pro Ala Tyr Val Gly Pro Glu Ile  
260 265 270  
Leu Ser Ser Arg Ala Ser Tyr Ser Gly Lys Ala Ala Asp Val Trp Ser  
275 280 285

Leu Gly Val Ala Leu Phe Thr Met Leu Ala Gly His Tyr Pro Phe Gln  
290 295 300

Asp Ser Glu Pro Val Leu Leu Phe Gly Lys Ile Arg Arg Gly Ala Tyr  
305 310 315 320

Ala Leu Pro Ala Gly Leu Ser Ala Pro Ala Arg Cys Leu Val Arg Cys  
325 330 335

Leu Leu Arg Arg Glu Pro Ala Glu Arg Leu Thr Ala Thr Gly Ile Leu  
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Leu His Pro Trp Leu Arg Gln Asp  
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Arg Ser Gly Pro Gln Pro Arg Leu Cys  
20 25

<210> 14  
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Gly Pro Tyr Val Leu Leu Glu Pro Glu Glu Gly Gly Arg Ala Tyr Gln  
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Ala Leu His Cys Pro Thr Gly Thr Glu  
20 25

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Arg Ser His Leu Trp Glu Ala Ala Gln Val Val Pro Asp Gly Leu Gly  
1 5 10 15

Leu Asp Glu Ala Arg Glu Glu Glu Cys  
20 25